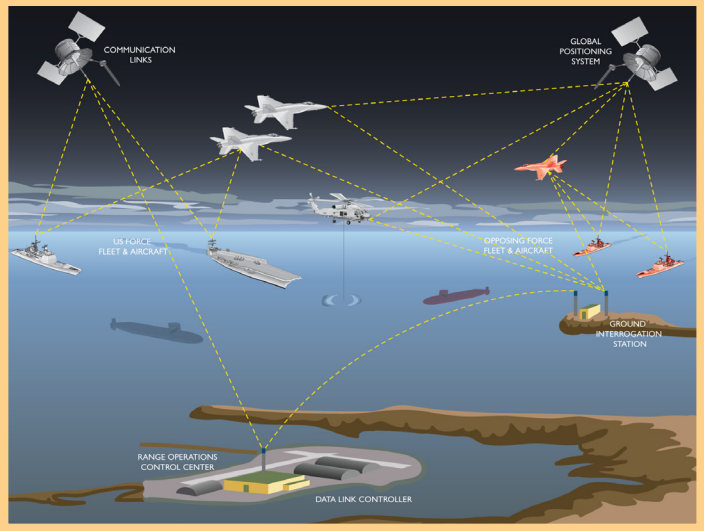
# Large Area Tracking Range

ATR
Atlantic Test Ranges

The Large Area Tracking Range (LATR) system is an integrated, off-shore, over-the-horizon (OTH), Time, Space, Position Information (TSPI) system for tracking surface and air participants in support of tactical training exercises at shore-based sea combat training ranges.

Using Global Positioning System (GPS) satellite tracking, LATR provides continuous real-time tracking of air and surface exercise participants up to 500 nautical miles from the Range Operations Control Center (ROCC) transmitting site at the Atlantic Test Ranges. LATR tracking information is collected at the ROCC, where it is combined with data available from other range systems (surveillance radar tracks, subsurface tracks, etc.) to form a total picture of the events occurring in the operational areas associated with the ROCC.



Operational diagram

During an exercise, LATR provides real-time exercise data to the command ship. After an exercise, LATR can transmit selected exercise data to ships and remote land-based sites. The data can be replayed for shipboard training. At land-based sites, the data can be used for reconstruction and debrief purposes. LATR supports training requirements that range from single-platform, unit-level operations to complex, multi-platform scenarios typical of Fleet Readiness Exercises. LATR also supports multiple independent operations.

LATR has transitioned to the Navy Operations and Support phase. In-service support of LATR hardware and software is the responsibility of NAVAIR PMA-205 with assistance from the LATR System Support Activity (SSA) located at Patuxent River. The LATR SSA provides background information for logistics support to Naval Surface Warfare Center Corona.

## FOR MORE INFORMATION

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NAVAIR RANGES
Leaders in providing decision-quality data

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# Large Area Tracking Range

## GPS-BASED TRACKING SYSTEM

- GPS-aided inertial measurement provides full-state vector
- 124-player capacity
- 500-nautical-mile tracking range with line-of-sight plus 3 relays
- Aircraft interfacing and weapons real-time data collection
- Continuous operation
- Multiple simultaneous exercises and missions
- 433 MHz $R^3$ frequencies available

**PARTICIPANT PACKAGES FOR FIXED-WING, ROTARY-WING AND SHIP PLATFORMS**

**DATA FUSION SYSTEM**

- Integrates data from local ranges: radar, underwater tracking, TACTS, sonobuoy tracking

**DEBRIEF SYSTEM**

- Allows debrief at ROCC, remote land bases and aboard ship

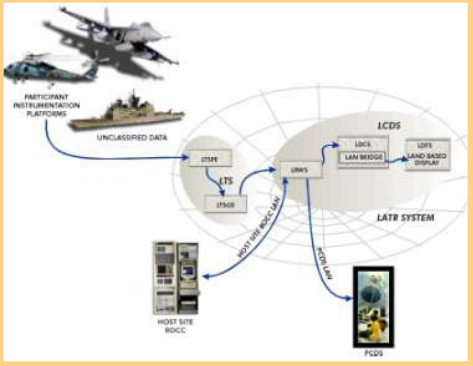
## LATR SYSTEMS SUPPORT ACTIVITY

- Established at NAVAIR Patuxent River in 1996
- Assumed role of ground software development and support from SAIC
- LATR is a CMM Level II Program
- Government managed and developed
- Systems, hardware, software engineering
- Configuration management and quality assurance
- Test and evaluation
- Independent verification and validation
- Diversity of services and products
- Rapid Application Development (RAD) process, reserved for emergency situations, ensures quick response to users

Fixed-wing internal package (AIP-FWI)

Fixed-wing package (AIP-FW)

Rotary-wing package (AIP-RW)




LATR system